

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009126**Date Inspected:** 16-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Zhu zhong hai  
**Inspected CWI report:** Yes No N/A  
**Electrode to specification:** Yes No N/A  
**Qualified Welders:** Yes No N/A  
**Approved Drawings:** Yes No N/A

**CWI Present:** Yes No  
**Rod Oven in Use:** Yes No N/A  
**Weld Procedures Followed:** Yes No N/A  
**Verified Joint Fit-up:** Yes No N/A  
**Approved WPS:** Yes No N/A  
**Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S.Chandrakumar was present during the times noted above for observations relative to the work being performed.

**SEGEMENT**

SMAW welding of repair weld joint 2G-004 located on PCMK SSD19-PP65 of 8BE welder is identified as 054013.ZPMC QC is identified as Mr. Wang xian pin . The welding variables recorded by QC appeared to Comply with the WPS-345-SMAW-2G(2F)-Repair and WR-7133.

SMAW welding of repair weld joint 2G-004 located on PCMK SSD20-PP053 of 7CE welder is identified as 070046.ZPMC QC is identified as Mr. Wang xian pin . The welding variables recorded by QC appeared to Comply with the WPS-345-SMAW-2F(2G)-Repair and WR6911.

**BAY#14**

FCAW welding of weld joint 1G-008 located on PCMK SSD13-PP91 of 10BW welder is identified as 202122.ZPMC QC is identified as Mr. Xu tao. The welding variables recorded by QC appeared to Comply with the WPS-B-T-2231-B-U2-F.

FCAW welding of weld joint 3F-066 located on PCMK SSD13-PP91 of 10BW welder is identified as 047866.ZPMC QC is identified as Mr.Xu tao. The welding variables recorded by QC appeared to Comply with the

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WPS-B-T-2133.

SMAW welding of weld joint 3G-001 located on PCMK SSD69-001 of 9BW welder is identified as 045218. ZPMC QC is identified as Mr.Li ming yang. The welding variables recorded by QC appeared to Comply with the WPS-B-T-2213-B-U2.

FCAW welding of weld joint 3G-20 located on PCMK SEG0 9BW welder is identified as 045218. ZPMC QC is identified as Mr.Li ming yang. The welding variables recorded by QC appeared to Comply with the WPS-B-T-2213-B-U2.

During visual inspection of Weld joint fit-up of Deck panel diaphragm DP233-001 9DW found that weld no 54,55 have 6 mm root gap, informed to ZPMC QC Mr.Liu wan ning. QC told us ZPMC will convert that joint into CJP and before welding they will get approval from engineer.

During visual inspection of Weld joint fit-up of Deck panel diaphragm DP097-001 9CW found that weld no 50,51 have 7 mm root gap, informed to ZPMC QC Mr.Liu wan ning. QC told us ZPMC will convert that joint into CJP and before welding they will get approval from engineer.

BAY#10

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated an UT report for this date. The members are identified as South tower Lift three. The weld designations reviewed are as follows:

SST13-1K/K-04,28,2930,31.

SST13-1K/K-16,18,19,42,

During verification of Ultrasonic Testing of the south tower lift-3 backfill plate Caltrans Quality Assurance (QA) Inspector discovered that backing bar is not fully welded for the CJP weld joint is identified as SST13-1C/K-096, 097. These weld joints have been previously tested and accepted by ZPMC Quality Control UT Technicians.

For further information, please see the Incident report

04-0120F4\_TL-15\_B255\_09-16-09\_\_South Tower\_89m\_Backing bar issue

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No Relevant Conversation.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Jim Simonis - 134-7246-3441, who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Chadra

Quality Assurance Inspector

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**Reviewed By:** Clifford, William

QA Reviewer